WHAT IS CLAIMED IS:

1. A well pump comprising:

a housing having an intake passage and a discharge passage;

at least one rotary pump stage located therein, the pump stage having at least one passage for the flow of well fluid; and wherein

at least one of the passages is coated with a substance to control the activity of bacteria.

2. The pump of claim 1, wherein the pump stage comprises an impeller and a diffuser, each having a plurality of the passages for the flow of well fluid, and the coating is applied to the passages of the impeller and the diffuser.

3. The pump of claim 1, wherein the substance contains one or more biocides.

4. The pump of claim 3, wherein the biocide is selected from the group consisting of an organic compound and an inorganic compound.

5. The pump of claim 1, wherein the coating comprises a compound selected from the group consisting of acrolein, formaldehyde, glutaraldehyde, sodium dichlorophenol, acetate salts of coco amines, acetate salts of coco diamines, acetate salts of tallow diamines, alkyl amino, alkyl dimethyl ammonium chloride, alkyl phosphates, coco dimethyl ammonium chloride, paraformaldehyde, sodium salts of phenols, and substituted phenols.

6. The pump of claim 1, wherein the coating comprises a compound selected from the group consisting of bromine, chlorine, sodium hydroxide, calcium sulfate, and salts of various metals.

7. The pump of claim 6, wherein the metals include copper, arsenic, tin, lead and zinc.

8. The pump of claim 1, wherein the pump comprises a progressing cavity pump, and the passage that is coated comprises the intake passage to the pump.

9. A well pump comprising:

a housing having an intake passage and a discharge passage;

a plurality of impellers and diffusers mounted in the housing, each of the impellers and diffusers having a plurality of passages for the flow of well fluid; and

a biocide coating on at least portions of the impellers and the diffusers to control the activity of bacteria.

10. The pump according to claim 9, wherein the passages in the impellers and the diffusers contain the biocide coating.

11. The pump according to claim 9, wherein the intake passage and the discharge passage also contain the biocide coating.

12. The pump of claim 9, wherein the coating comprises a compound selected from the group consisting of includes acrolein, formaldehyde, glutaraldehyde, sodium dichlorophenol, acetate salts of coco amines, acetate salts of coco diamines, acetate salts of tallow diamines, alkyl amino, alkyl dimethyl ammonium chloride, alkyl phosphates, coco dimethyl ammonium chloride, paraformaldehyde, sodium salts of phenols, and substituted phenols.

13. The pump of claim 9, wherein the coating comprises a compound selected from the group consisting of bromine, chlorine, sodium hydroxide, calcium sulfate, and salts of various metals.

14. The pump of claim 13, wherein the metals include copper, arsenic, tin, lead and zinc.

15. A method of inhibiting bacteria from growing in a submersible well pump, comprising the steps of:

(a) incorporating one or more biocides in a coating; and

(b) applying the biocide-incorporated coating to the internal and/or external surfaces of one or more components of the pump.

16. The method of claim 15, wherein step (a) comprises mixing the one or more biocides while in a dry state with the coating while in a liquid state.

17. The method of claim 15, wherein step (a) comprises mixing the one or more biocides while in a granular state with the coating while in a liquid state.

18. The method of claim 15, wherein step (a) comprises mixing the one or more biocides while in a liquid state with the coating while in a liquid state.

19. The method of claim 15, wherein the one or more biocides are in a microscopic time release capsule.

20. The method of claim 15, wherein step (b) comprises either by dipping or spraying the one or more components of the pump with the coating while in a liquid state.

21. The method of claim 15, wherein the biocide is selected from the group consisting of acrolein, formaldehyde, glutaraldehyde, sodium dichlorophenol, acetate salts of coco amines, acetate salts of coco diamines, acetate salts of tallow diamines, alkyl amino, alkyl dimethyl ammonium chloride, alkyl phosphates, coco dimethyl ammonium chloride, paraformaldehyde, sodium salts of phenols, and substituted phenols.

22. The method of claim 15, wherein the biocide is selected from the group consisting of bromine, chlorine, sodium hydroxide, calcium sulfate, and salts of various metals.

23. The method of claim 20, wherein the metals include copper, arsenic, tin, lead and zinc.